

## Claims

WHAT IS CLAIMED IS:

- 1     1.     A method for securely accelerating an external domain locally, comprising:  
2             receiving a secure communications request for an external domain from a  
3     client;  
4             identifying a domain identification associated with the request; and  
5             routing the request to a local domain accelerator based on the domain  
6     identification, wherein the local domain accelerator communicates securely with the  
7     external domain and securely with the client, and wherein the local domain  
8     accelerator caches data from the external domain for servicing the request of the  
9     client.
- 1     2.     The method of claim 1 further comprising processing the method as at least  
2     one of a forward proxy and a transparent proxy.
- 1     3.     The method of claim 1 further comprising, returning, by the local domain  
2     accelerator, to the client a domain certificate that identifies the local domain  
3     accelerator as the external domain to the client.
- 1     4.     The method of claim 1 further comprising, establishing a Secure Sockets  
2     Layer (SSL) handshake between the client and the local domain accelerator to  
3     service the request, wherein the client believes that the handshake is with the  
4     external domain.
- 1     5.     The method of claim 1 wherein receiving further includes intercepting the  
2     request that originates from the client for the external domain.
- 1     6.     The method of claim 1 further comprising, accessing, by the local domain  
2     accelerator, caching services for caching and managing the data.

1 7. The method of claim 1 wherein identifying further includes stripping a host  
2 header from the request, wherein the host header is the domain identifier which  
3 identifies the external domain.

1 8. A method for securely accelerating an external domain locally, comprising:  
2 receiving a secure request forwarded from a proxy, the secure request  
3 originating from a client and destined for an external domain;  
4 establishing a secure communication with the client by providing the client a  
5 certificate associated with the external domain; and  
6 servicing the client with data from local cache that is acquired from the  
7 external domain, and wherein a portion of that data is used to service the secure  
8 request.

1 9. The method of claim 8 wherein servicing further includes acting as the  
2 external domain when interacting with the client.

1 10. The method of claim 8 further comprising accessing caching services from  
2 the proxy to manage the data in the local cache.

1 11. The method of claim 8 wherein servicing further includes acquiring at least a  
2 portion of the data from the external domain in advance of a subsequent request for  
3 that portion of the data, wherein the subsequent request is issued from the client.

1 12. The method of claim 8 wherein servicing further includes interacting  
2 securely with the external domain to acquire the data housed in the local cache.

1 13. The method of claim 12 wherein interacting securely further includes  
2 mutually signing interactions transmitted between the method and the external  
3 domain.

1 14. The method of claim 13 wherein interacting securely further includes using  
2 the proxy to establish a secure communications channel between the method and the  
3 external domain.

1 15. An external domain acceleration system, comprising:  
2 a proxy;  
3 a local domain accelerator, wherein a client securely requests an external  
4 domain and the proxy routes the request to the local domain accelerator, the local  
5 domain accelerator securely communicates with the external domain and caches  
6 data in a local cache of the proxy which is used to service the client via secure  
7 communications between the local domain accelerator and the client.

1 16. The external domain acceleration system of claim 15 wherein the local  
2 domain accelerator vends a certificate associated with the external domain to the  
3 client to present itself as the external domain.

1 17. The external domain acceleration system of claim 15 wherein  
2 communications between the local domain accelerator and the external domain are  
3 mutually signed.

1 18. The external domain acceleration system of claim 15 wherein the client is a  
2 browser application that interacts with the local domain accelerator via Secure  
3 Sockets Layer (SSL) communications.

1 19. The external domain acceleration system of claim 15 wherein the proxy is at  
2 least one of a transparent proxy and a forward proxy.

1 20. The external domain acceleration system of claim 15 wherein the proxy  
2 creates a secure communications tunnel between the client and the local domain  
3 accelerator and the proxy creates a secure communications channel between the  
4 local domain accelerator and the external domain.

1 21. An external domain acceleration system, comprising:  
2 a local domain accelerator; and  
3 cache, wherein the local domain accelerator securely communicates with a  
4 client as if the local domain accelerator was an external domain and securely  
5 communicates with the external domain for purposes of acquiring data from the  
6 external domain, and wherein the local domain accelerator houses the data in and  
7 vends the data from the cache to the client.

1 22. The external domain acceleration system of claim 21 further comprising a  
2 proxy that acts as a secure conduit between the client and the local domain  
3 accelerator and a secure conduit between the local domain accelerator and the  
4 external domain.

1 23. The external domain acceleration system of claim 21 wherein the local  
2 domain accelerator vends a certificate associated with the external domain to the  
3 client to present itself as the external domain.

1 24. The external domain acceleration system of claim 23 wherein the local  
2 domain accelerator and the external domain exchange certificates with one another  
3 during communications with one another.

1     25.     The external domain acceleration system of claim 21 wherein the client is a  
2     browser and uses Secure Sockets Layer (SSL) communications to attempt to  
3     directly communicate with the external domain, the communications are intercepted  
4     and forwarded to a proxy and the proxy forwards the communications to the local  
5     domain accelerator where the local domain accelerator presents itself securely to the  
6     client as if it were the external domain.

1     26.     The external domain acceleration system of claim 21 wherein the external  
2     domain includes a plurality of external sites having a plurality of services.